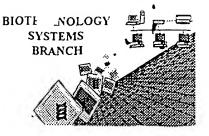
ر دن ۱۶/۶ن

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: $\frac{10/072}{0.072}$, 602ASource: 0.072Date Processed by STIC: 8-13-02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (httm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
- Hand Carry directly to:
 U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
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Revised 01/29/2002

Does Not Comply Corrected Diskette Needed



see p. 6-10 erron on page 3

RAW SEQUENCE LISTING

Cognetix, Inc.

3 <110> APPLICANT: University of Utah Research Foundation

PATENT APPLICATION: US/10/072,602A

TIME: 14:18:04

DATE: 08/13/2002

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              Olivera, Baldomero M.
      6
              McIntosh, J, Michael
      7
              Watkins, Maren
      8
              Garrett, James E.
      9
              Cruz, Lourdes J.
              Grilley, Michelle
     10
              Schoenfeld, Robert M.
     11
              Walker, Craig
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              Shetty, Reshma
     13
              Jones, Robert M.
     14
     16 <120> TITLE OF INVENTION: Cone Snail Peptides
     18 <130> FILE REFERENCE: 2314-249
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C--> 20 <141> CURRENT FILING DATE: 2002-02-11
     20 <150> PRIOR APPLICATION NUMBER: US 60/267,408
     21 <151> PRIOR FILING DATE: 2001-02-09
     23 <160> NUMBER OF SEQ ID NOS: 638
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     41 tcg acc cag gcc ctg gtt gaa cgt gct gga gaa aac cgc tca aag gag
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     42 Ser Thr Gln Ala Leu Val Glu Arg Ala Gly Glu Asn Arg Ser Lys Glu
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     45 aac atc aat ttt tta tta aaa aga aag aga gct gct gac agg ggg atg
                                                                               144
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                                                                               192
     49 tgg ggc gat tgc aaa gat ggg tta acg aca tgt ttt gcg ccc tca gag
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                                                         60
     53 tgt tgt tct gag gat tgt gaa ggg agc tgc acg atg tgg tgatgacctc
                                                                            241
     54 Cys Cys Ser Glu Asp Cys Glu Gly Ser Cys Thr Met Trp
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     68 Thr Gln Ala Leu Val Glu Arg Ala Gly Glu Asn Arg Ser Lys Glu Asn
                                        25
     71 Ile Asn Phe Leu Leu Lys Arg Lys Arg Ala Ala Asp Arg Gly Met Trp
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     77 Cys Ser Glu Asp Cys Glu Gly Ser Cys Thr Met Trp
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     86 <221> NAME/KEY: PEPTIDE
     87 <222> LOCATION: (1)..(31)
     88 <223> OTHER INFORMATION: Xaa at residues 18, 22 and 25 is Glu or gamma-carboxy-Glu;
Xaa at
     89
             residue 16 is Pro or hydroxy-Pro; Xaa at residues 3 and 31is Trp
     90
              (D or L) or bromo-Trp (D or L)
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     94 1
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                   20
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    102 <213> ORGANISM: Conus ammiralis
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    106 <222> LOCATION: (4)..(246)
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    111
                                                 10
    113 teg acc cag gcc ctg cct caa ggt ggt gga gaa aaa cgc cca agg gag
                                                                                96
    114 Ser Thr Gln Ala Leu Pro Gln Gly Gly Glu Lys Arg Pro Arg Glu
    117 aat atc aga ttt tta tca aaa aga aag aca aat gct gag cgt tgg agg
                                                                               144
    118 Asn Ile Arg Phe Leu Ser Lys Arg Lys Thr Asn Ala Glu Arg Trp Arg
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    121 gag ggc agt tgc acc tct tgg tta gcg acg tgt acg caa gac cag caa
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DATE: 08/13/2002

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TIME: 14:18:04
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     129 gac cgc tgaccacaag ccatctgaca tcaccactct cctgttcaga gtcttcaag
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     130 Asp Arg
     131 80
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     134 <211> LENGTH: 81
     135 <212> TYPE: PRT
     136 <213> ORGANISM: Conus ammiralis
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                                               10
     142 Thr Gln Ala Leu Pro Gln Gly Gly Glu Lys Arg Pro Arg Glu Asn
     145 Ile Arg Phe Leu Ser Lys Arg Lys Thr Asn Ala Glu Arg Trp Arg Glu
                                      40
     148 Gly Ser Cys Thr Ser Trp Leu Ala Thr Cys Thr Gln Asp Gln Gln Cys
                                                                   residue Z is Arg not
Vaa. Residue 5 is Ser
Vaa. no + Xaa.
     151 Cys Thr Asp Val Cys Tyr Lys Arg Asp Tyr Cys Ala Leu Trp Asp Asp
     152 65
                              70
                                                   75
     154 Arg
     156 <210> SEQ ID NO: 6
     157 <211> LENGTH: 36
     158 <212> TYPE: PRT
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     162 <221> NAME/KEY: PEPTIDE
     163 <222> LOCATION: (1)..(36)
     164 <223> OTHER INFORMATION: Xaa at residue 3 is Glu or gamma-carboxy-Glu; Xaa at
residues 1,
                g and 33 is Trp (D or L) or bromo-Trp (D or L); Xaa at residues(2)
     165
              5 and 29 is Tyr, 125I-Tyr, mono-iodo-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
     166
     167
     169 <400> SEQUENCE: 6
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     171 Î
W--> 173 Gln Gln Cys Cys Thr Asp Val Cys Xaa Lys Arg Asp Xaa Cys Ala Leu
     174
W--> 176 Xaa Asp Asp Arg
     177 -
                 35
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RAW SEQUENCE LISTING

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                                                                                 96
     193 tcq acc cag gcc ctg ttt caa gaa aaa cgc aca atg aag aag atc gat
     194 Ser Thr Gln Ala Leu Phe Gln Glu Lys Arg Thr Met Lys Lys Ile Asp
                         20
                                              25
     197 ttt tta tca aag gga aag gca gat gct gag aag cag agg aag cgc aat
                                                                               144
     198 Phe Leu Ser Lys Gly Lys Ala Asp Ala Glu Lys Gln Arg Lys Arg Asn
                                          40
     199
                     35
                                                                                192
     201 tgc tcg gat gat tgg cag tat tgt gaa agt ccc agt gac tgc tgt agt
     202 Cys Ser Asp Asp Trp Gln Tyr Cys Glu Ser Pro Ser Asp Cys Cys Ser
                 50
                                      55
     205 tgg gat tgt gat gtg gtc tgc tcg gga tgaactctga ccacaagtca
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     206 Trp Asp Cys Asp Val Val Cys Ser Gly
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     211 <210> SEQ ID NO: 8
     212 <211> LENGTH: 72
     213 <212> TYPE: PRT
     214 <213> ORGANISM: Conus ammiralis
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     218 1
     220 Thr Gln Ala Leu Phe Gln Glu Lys Arg Thr Met Lys Lys Ile Asp Phe
     223 Leu Ser Lys Gly Lys Ala Asp Ala Glu Lys Gln Arg Lys Arg Asn Cys
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     226 Ser Asp Asp Trp Gln Tyr Cys Glu Ser Pro Ser Asp Cys Cys Ser Trp
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     229 Asp Cys Asp Val Val Cys Ser Gly
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     237 <220> FEATURE:
     238 <221> NAME/KEY: PEPTIDE
     239 <222> LOCATION: (1)..(25)
     240 <223> OTHER INFORMATION: Xaa at residue 10 is Glu or gamma-carboxy-Glu; Xaa at
residue 12
               is Pro or hydroxy-Pro; Xaa at residues 6 and 18 is Trp (D or L) o
     241
               r bromo-Trp (D or L); Xaa at residue 8 is Tyr, 125I-Tyr, mono-iod
     242
               o-Tyr, di-iodo-Tyr, O-sulpho-Tyr or O-phospho-Tyr
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     264
     266 tcg atc cag gcg gta aat caa gaa aaa cac caa cgg gca aag atc aac
                                                                                96
     267 Ser Ile Gln Ala Val Asn Gln Glu Lys His Gln Arg Ala Lys Ile Asn
     270 ttg ctt tca aag aga aag cca cct gct gag cgt tgg tgg cgg tgg gga
                                                                               144
     271 Leu Leu Ser Lys Arg Lys Pro Pro Ala Glu Arg Trp Trp Arg Trp Gly
                     35
                                         40
     274 gga tgc atg gct tgg ttt ggg aaa tgt tcg aag gac tcg gaa tgt tgt
                                                                               192
     275 Gly Cys Met Ala Trp Phe Gly Lys Cys Ser Lys Asp Ser Glu Cys Cys
                 50
                                     55
     278 tet aat agt tgt gac ata acg ege tge gag tta atg ega tte eea eea
                                                                               240
     279 Ser Asn Ser Cys Asp Ile Thr Arg Cys Glu Leu Met Arg Phe Pro Pro
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     283 Asp Trp
     284 80
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     289 <213> ORGANISM: Conus ammiralis
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     293 1
                         5
                                             10
     295 Ile Gln Ala Val Asn Gln Glu Lys His Gln Arg Ala Lys Ile Asn Leu
                                         25
     298 Leu Ser Lys Arg Lys Pro Pro Ala Glu Arg Trp Trp Arg Trp Gly Gly
     301 Cys Met Ala Trp Phe Gly Lys Cys Ser Lys Asp Ser Glu Cys Cys Ser
                                 55
     304 Asn Ser Cys Asp Ile Thr Arg Cys Glu Leu Met Arg Phe Pro Pro Asp
     305 65
                                                 75
     306 Trp
     308 <210> SEQ ID NO: 12
     309 <211> LENGTH: 39
     310 <212> TYPE: PRT
     311 <213> ORGANISM: Conus ammiralis
     313 <220> FEATURE:
     314 <221> NAME/KEY: PEPTIDE
     315 <222> LOCATION: (1)..(39)
     316 <223> OTHER INFORMATION: Xaa at residues 19 and 31 is Glu or gamma-carboxy-Glu; Xaa
at res
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Input Set: A:\249 revised sequence.txt
Output Set: N:\CRF3\08132002\J072602A.raw

Please Note:

Seq#:3; Xaa Pos. 3,16,18,22,25,31

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:9; Xaa Pos. 6,8,10,12,18
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Seg#:15; Xaa Pos. 5,8,14,18,19
Seq#:18; Xaa Pos. 3,5,7,8,14,18
Seg#:21; Xaa Pos. 4,7,9,13,17,23,27
Seq#:24; Xaa Pos. 8,13
Seq#:27; Xaa Pos. 8,13
Seq#:30; Xaa Pos. 4,5,11
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Seq#:376; N Pos. 121,126,130,131,135,136,144,153,154,156,159,166,169,172
Seq#:376; N Pos. 173,174,175,181,182,184,185,193,194,195,209,213,214,226
Seq#:376; N Pos. 227,228,230,233,234,235,236,248,250,252,254,257,260,261
Seq#:376; N Pos. 262,266,269,295,303,331,340,345,380,407,439,525,533
Seq#:376; Xaa Pos. 3,14
Seq#:377; Xaa Pos. 3,14
Seg#:378; Xaa Pos. 1,5,11
Seg#:381; Xaa Pos. 1,5
Seq#:384; Xaa Pos. 2,6,10,12
Seq#:387; Xaa Pos. 2,6
Seq#:390; Xaa Pos. 6,10,12
Seg#:393; Xaa Pos. 1,3,8,11,14,16
Seq#:396; Xaa Pos. 1,3,8,11,14,16
Seq#:399; Xaa Pos. 2,8,12
Seq#:402; Xaa Pos. 6,10
Seq#:403; Xaa Pos. 6,13
Seg#:404; Xaa Pos. 6,13
Seg#:407; Xaa Pos. 1,7,14
Seq#:410; Xaa Pos. 1,2,7,14,15
Seq#:413; Xaa Pos. 1,2,7,14,15
Seg#:416; Xaa Pos. 5
Seq#:417; Xaa Pos. 4,6,11
Seq#:418; N Pos. 193
Seq#:420; Xaa Pos. 4,6,7,10,13
Seq#:423; Xaa Pos. 6,11,12,13,14
Seq#:424; N Pos. 210
Seq#:426; Xaa Pos. 2,7,8,14,19
Seq#:429; Xaa Pos. 5,10,12
Seq#:432; Xaa Pos. 6,13
Seq#:435; Xaa Pos. 5,6,12
Seg#:438; Xaa Pos. 7,8,14
Seq#:441; Xaa Pos. 6,7,10,13
Seq#:444; Xaa Pos. 6,7,13
Seq#:447; Xaa Pos. 6,7,9,15
Seq#:450; Xaa Pos. 2,7,10,13
Seq#:453; Xaa Pos. 7,15
Seq#:454; N Pos. 8,14,15,22,25,27,32,33,37,52,59,60,65,75,78,87,88,93,101
Seq#:454; N Pos. 104,106,108,110,114,116,120,130,131,132,136,141,146,151
Seq#:454; N Pos. 157,159,172,175,176,183,184,186,189,190,195,198,201,202
Seq#:454; N Pos. 206,209,210,211,213,219,220,224,228,235,242,244,250,255
Seq#:454; N Pos. 258,259,262,269,276,290,294,301,306,308,309,316,318,320
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Seq#:454; N Pos. 322,324,336,372
Seg#: 456; Xaa Pos. 6,7,8,9,11,12,14,15,16
Seq#:465; Xaa Pos. 14,26,31
Seq#:467; Xaa Pos. 9,13,17
Seq#:468; Xaa Pos. 16
Seq#:469; Xaa Pos. 13
Seq#:470; Xaa Pos. 16
Seq#:471; Xaa Pos. 1,5,6,10,15,26,33
Seq#:473; Xaa Pos. 3,7,8,14
Seq#:475; Xaa Pos. 16
Seq#:476; Xaa Pos. 18
Seq#:477; Xaa Pos. 18
Seq#:478; Xaa Pos. 19
Seq#:479; Xaa Pos. 9,13
Seq#:531; Xaa Pos. 12
Seq#:532; Xaa Pos. 11
Seq#:542; Xaa Pos. 3
Seq#:543; Xaa Pos. 5,6
Seq#:548; Xaa Pos. 7,13,21,22,27
Seq#:569; Xaa Pos. 4,13,16
Seq#:585; Xaa Pos. 2,3,12,14
Seq#:622; Xaa Pos. 3
Seq#:625; Xaa Pos. 9
Seq#:627; Xaa Pos. 3
Seq#:628; Xaa Pos. 2
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VERIFICATION SUMMARY PATENT APPLICATION: US/10/072,602A TIME: 14:18:05

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L:20 M:270 C: Current Application Number differs, Replaced Current Application No
L:20 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:93 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16
L:170 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16
L:176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:32
L:246 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:249 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:16
L:321 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:16
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:32
L:397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:16
L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:16
L:547~M:341~W:~(46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:550 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:16
L:628 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:709 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:785 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:863 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:866 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:16
L:941 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:944 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16
L:1018 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:1021 \ M:341 \ W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:16
L\!:\!1095~M\!:\!341~W\!: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:1098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:16
L:1159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:1220 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
L:1283 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0
L:1344 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54 after pos.:0
L:1407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:57 after pos.:0
L:1470 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:0
L:1473 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:16 L:1535 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63 after pos.:0
L:1611 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0
L:1614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:16
L:1690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:0
L:1693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:16
L:1696 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:32 L:1772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:0
L:1775 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:16
L:1778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72 after pos.:32
L:1856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:16
L:1859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:75 after pos.:32
L:1937 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:16
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VERIFICATION SUMMARY PATENT APPLICATION: US/10/072,602A DATE: 08/13/2002 TIME: 14:18:05

Input Set : A:\249 revised sequence.txt
Output Set: N:\CRF3\08132002\J072602A.raw

L:1940 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:78 after pos.:32 L:2016 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:0 L:2019 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:16 L:2022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81 after pos.:32